Amendments to the Claims:

This Listing of Claims replaces all prior versions, and listings, of claims in this application.

Listing of Claims:

1. (Currently Amended) A method of providing an automatic loudness compensation circuit comprising:

receiving an input audio signal [containing] with a range of frequencies where a lower portion of the range contains a bass content;

coupling the input audio signal to a voltage detector having an output voltage;

coupling the output voltage of the voltage detector to a filter circuit for adjusting a corner frequency associated with the filter circuit such that the corner frequency is inversely related to the input audio signal for boosting the bass content of the input audio signal; and

coupling an output of the filter circuit to a power amplifier for amplifying the filter circuit output.

2. (Original) The method of claim 1 wherein the method further comprises driving an audio speaker with the amplified filter circuit output.

3. (Original) The method of claim 1 wherein the filter circuit further comprises a capacitance multiplier circuit comprising a light emitting device coupled to a light sensitive resistor.

4. (Original) The method of claim 3 wherein the capacitance multiplier circuit further comprises a low pass filter coupled to the light emitting device and the light sensitive resistor.

5. (Original) The method of claim 4 wherein the filter circuit adjusts the corner frequency of the low pass filter within an operating frequency range.

6. (Original) The method of claim 5 wherein the filter circuit adjusts the corner frequency of the low pass filter such that the corner frequency is increased when the input audio signal decreases.

7. (Original) The method of claim 3 wherein the amount boost to the bass content of the input audio signal is proportional to the corner frequency of the low pass filter.

8. (Original) The method of claim 3 wherein the amount boost to the bass content of the input audio signal is proportional to the value of the light sensitive resistor.

9. (Original) The method of claim 1 wherein the source of the input audio signal is a compact disc.

10. (Original) The method of claim 1 wherein the source of the input audio signal is a cassette.

11. (Original) The method of claim 1 wherein the source of the input audio signal is a digital video disc.

12. (Original) The method of claim 1 wherein the source of the input audio signal is a microphone.

13. (Original) The method of claim 12 wherein the output of the filter circuit and the microphone input audio signal are coupled to a summing circuit having an output signal.

14. (Original) The method of claim 13 wherein the output of the summing circuit is coupled to the power amplifier.

15. (Currently Amended) A method of providing an automatic loudness compensation circuit comprising:

receiving an input audio signal [including] with a range of frequencies where a lower portion of the range includes a bass content;

coupling the input audio signal to a voltage detector to produce an output voltage;

coupling the output voltage of the voltage detector to a control circuit, the control circuit comprising a filter circuit;

comparing a corner frequency associated with the filter circuit to the strength of the input audio signal;

shifting the corner frequency such that the corner frequency is inversely related to the strength of the input audio signal;

coupling an output of the filter circuit to a power amplifier for amplifying the filter circuit output; and

driving an audio speaker with the amplified filter circuit output.

16. (Original) The method of claim 15, further comprising:

utilizing a capacitance multiplier circuit comprising a light emitting device coupled to a light sensitive resistor having an output signal wherein the output of the light sensitive resistor is coupled to a low pass filter for adjusting the bass content of the input audio signal.

17. (Original) The method of claim 16, further comprising:

responding to an increase in the input audio signal by energizing the light emitting device within the filter circuit to produce a light source; and

decreasing the resistance of the light sensitive resistor; and

increasing the value of the capacitor in order to shift the corner frequency such that bass boosting of the audio input signal is quickly removed.

18. (Original) The method of claim 16 further comprising:

responding to a decrease in the audio input signal by de-energizing the light emitting device within the filter circuit in order to prevent a light source;

increasing the resistance of the light sensitive resistor; and

decreasing the value of the capacitor in order to shift the corner frequency such that bass boosting of the audio input signal is slowly added.

19. (Original) The method of claim 15 wherein the amount boost to the bass content of the input audio signal is proportional to the corner frequency of the filter circuit.

20. (Original) The method of claim 16 wherein the amount boost to the bass content of the input audio signal is proportional to the value of the light sensitive resistor.

21. (Original) The method of claim 16, wherein the light sensitive resistor is an opto-coupled resistor.

22. (Currently Amended) An automatic loudness compensation circuit including a terminal coupled to an input audio signal from an external source and a signal supply having voltage sufficient to drive an output audio speaker comprising:

an R.M.S. detector for providing an R.M.S. voltage from the input audio signal with a range of frequencies where a lower portion of the range includes a bass content;

a control circuit including a filter circuit for adjusting a corner frequency associated with the filter circuit such that the corner frequency is inversely related to the input audio signal;

a power amplifier for increasing the power of the output signal from the low pass filter circuit; and

a terminal for providing an amplified output signal.

23. (Original) The automatic loudness compensation circuit of claim 22 wherein the control circuit provides a boost to the input audio signal containing a bass content such that the boost is proportional to the corner frequency of the filter circuit.

24. (Original) The automatic loudness compensation circuit of claim 22 wherein the filter circuit further comprises a light emitting device coupled to a light sensitive resistor having an output signal wherein the output of the light sensitive resistor is coupled to a low pass filter.

25. (Original) The automatic loudness compensation circuit of claim 24 wherein the control circuit provides a boost to the input audio signal containing a bass content such that the boost is proportional to the output of the light sensitive resistor.

26. (Currently Amended) An automatic loudness compensation circuit including a terminal coupled to an input audio signal from an external source and a signal supply having voltage sufficient to drive an output audio speaker comprising:

means for detecting an R.M.S. voltage from the audio input signal with a range of frequencies where a lower portion of the range includes a bass content;

means for adjusting a corner frequency of a filter circuit such that the corner frequency is inversely related to the audio input signal;

means for amplifying the output signal from the filter circuit; and

a terminal for providing an amplified output signal.

27. (Currently Amended) A system for obtaining a first order bass boost compensation comprising:

a terminal for receiving an audio input signal having a signal level;

a level control for determining the level of the input audio signal with a range of frequencies where a lower portion of the range includes a bass content;

an automatic loudness compensation circuit having an output signal comprising:

a power supply voltage having voltage sufficient to drive an output audio speaker;

an R.M.S. detector coupled to the power supply voltage for providing an R.M.S. voltage from the input audio signal; and

a control circuit coupled to the R.M.S. detector comprising a filter having an associated corner frequency, the control circuit for adjusting the corner frequency such that the corner frequency is inversely related to the input audio signal;

a summing circuit having an output signal coupled to the automatic loudness compensation circuit for receiving input from a microphone and summing the microphone input to the output of the automatic loudness compensation circuit;

a power amplifier coupled to the summing circuit for increasing the power of the output signal from the summing circuit; and

a terminal for providing an amplified output signal to an audio speaker.

28. (Original) The method of claim 27, wherein the audio input signal is received from a compact disc player.

29. (Original) The method of claim 27, wherein the audio input signal is received from a cassette player.

30. (Original) The method of claim 27, wherein the audio input signal is received from a digital video disc player.

31. (Currently Amended) A system for obtaining an automatic loudness compensation comprising:

a input terminal for receiving an audio input signal having a signal level with a range of frequencies where a lower portion of the range includes a bass content;

a level control coupled to the input terminal for determining the level of the input audio signal;

an automatic loudness compensation circuit having an output signal coupled to the level control comprising a filter circuit for adjusting a corner frequency associated with the filter circuit such that the corner frequency is inversely related to the audio input signal;

a summing circuit having an output signal coupled to the automatic loudness compensation circuit for receiving input from a microphone and summing the microphone input to the output of the automatic loudness compensation circuit;

a power amplifier coupled to the summing circuit for increasing the power of the output signal from the summing circuit; and

a output terminal coupled to for providing an amplified output signal to an audio speaker.

32. (Currently Cancelled).

33. (Currently Cancelled).

34. (Currently Cancelled).

35. (Currently Cancelled).

36. (Currently Cancelled).